



# Vehicle Dynamics Kinematics Engineer

## Green innovation meets performance

### Our Project

---

Formula Electric Belgium is a team of engineering students who build a **Formula Student race car** to compete in international competitions. We design and build a brand-new car every year and compete with other teams in multiple worldwide competitions during the summer months. Formula Student is by far the biggest **engineering competition** in the world and continues to grow. Next year, we will be competing in both the **electrical** and **driverless** competition. You can join the project during one or two years by applying for the '**Postgraduate in Innovation and Entrepreneurship in Engineering**'.

### Tasks

---

The hardpoints of the suspension define the kinematics and thus the movement of the wheels in different driving scenarios. In this role you will define these hardpoints to enhance and achieve desired vehicle handling. To do this you will use software that can estimate wheel travel, toe-gain, camber-gain and other KPIs for set maneuvers.

In addition, you will work with the Performance Engineer to define the load cases for the suspension and in-wheel components, as well as analyze tire data together.

The goal of this role is to build a car that is reliable and always provides the right amount of grip based on our tires.

As a member of the suspension department, you will also make the suspension arms which means using a sandblaster and a lot of glue.

### Profile

---

- Bachelor/Master Engineering Science, Engineering Technology or Business Engineering
- Basic knowledge about vehicle dynamics
- Experience or interest in kinematic simulations
- Working iteratively is no problem for you
- Good communication skills

### Returns

---

- A unique engineering experience
- Developing your hard- and soft-skills in a company-like environment
- Work with the newest technologies and innovative companies
- Work in a team with a network of well over 120 partners
- A summer season packed with competitions all over Europe
- An experience of a lifetime!

### Up for the challenge?

---



Submit your **resume** and **motivation letter** (one page) to  
<https://formulaelectric.be/vacancies-theses/>